SITE:	Redwood City Gibson Oil	LATITUDE:	37-31'
HAZARD:	Facility	LONGITUDE:	122-12'
VOLUME:	2,000 bbl		
DURATION:	3 days		

TRAJECTORY ANALYSIS

A spill trajectory envelope was calculated for one facility located on the western shore of south San Francisco Bay in Redwood City. The trajectory analysis predicted the movement and spreading of a spill released into the water from the shoreline facility. The trajectory analysis considered oil transport by the wind and tidal currents, and spreading of the oil spill by physical processes such as gravity, surface tension, and tidal dispersion.

Spill transport on a flood tide combined with spreading and northerly winds could carry the spill southward to the southern shore of San Francisco Bay within the 3-day time period. A spill during the ebbing tide would be transported by tidal action approximately 2 miles north of the San Mateo Bridge. Further movement to the north would occur by physical spreading and by wind drift during southerly winds. These two processes would be expected to carry the spill as far north as Richmond during the 3-day time period. Spreading and tidal dispersion would also be expected to carry the spill through the Golden Gate over 3 days.

These spill trajectory envelopes represent the outer perimeter of shoreside areas that could receive oil in the event of any spill. The envelopes are based on regional extremes of climate, tide, current, and wind and assume pessimistic dispersion and other adverse weather conditions. These trajectory envelopes do not represent the trajectory of any one spill. A full discussion of the details used for preparing these spill envelopes is provided in Section 202.2.